

AAGTCAACAA AGATGGAGCA CTGGCGTTGC TCCCCAAAACA GCAGGAGAAC
GGCGACCGGC CGGAGAAGGC TGGCGCCCT GAAACCAGCA AGGAATAACG
CCCAGGTGTC CCGGGTGATG GATAACCACA TCCTGGTGTT AGTGCAGGAT
CCGCGAGCTC GAAACGTGGC TCCGTTGAA GAACCAACCA AGGAGACCCC
GCCATCCCGG CCGCAGAATC CAGCTGCGAA AGACCTGGCC G/AGCTTCACCA
CGGCCCCGGG CCACTGCAGA CACCCGCTGG GTGGGCTGGA TTACCTCGAT
CCCGCAGGCT TTATGCACTC CTTTCAGTGA GAGCTTGGTT CATGGGATGA
TGGGTTACAA GGTGGGGTTT TTTTCAGGTC GCACTACGTG AAATGCACTC
TACCAGAGAA AGCTCGAAAA TGGGGTTAGA ATGACACTAC CCAGACTCAC
AGTTCACTCC TCTTCATGCT CCATTITCAA CCACCTGCCTCTT

G/A=G or A at polymorphic site

Fig. 1

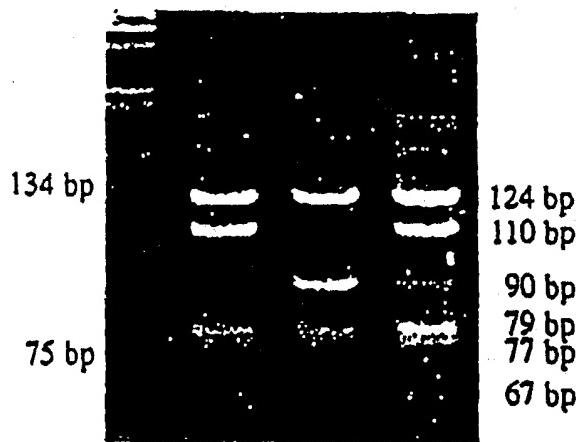


Fig. 2

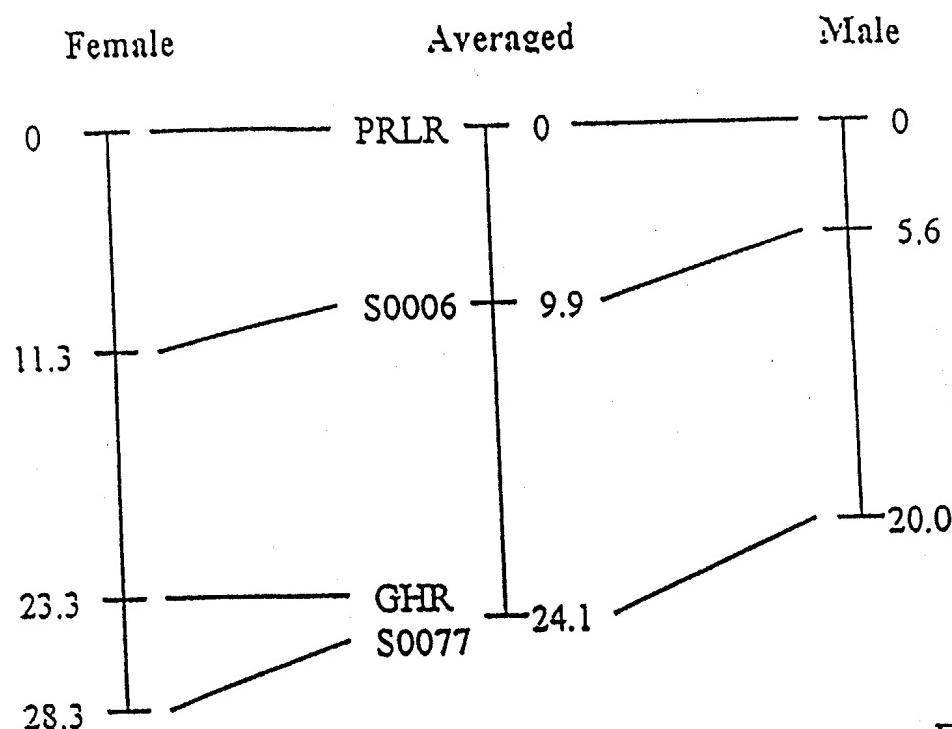


Fig. 3

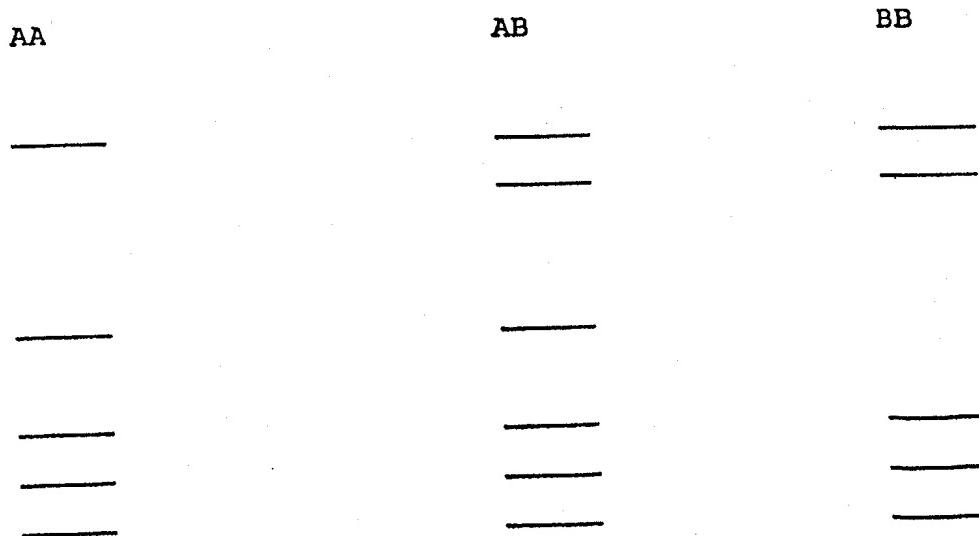


Fig. 4

P02285US5 (ISURF 2159 P1P2)
ROTHSCHILD, et al.
PROLACTIN RECEPTOR GENE AS A
GENETIC MARKER FOR INCREASED
LITTER SIZE IN ANIMALS
Sheet 3 of 5

1	GATTATTGTC	TGGGCAGTGG	-----	TCTTCTCTGT	CTATCNACCC	CCCTCCCATT	60
61	CATGGCTCTC	AGGGTATAAT	GGCCAAAAAA	AAGACAAGAC	AAAAATGATG	GAAACCTACA	120
121	GATAATTYYAA	GCACCTCATT	TTGCCATTAG	CTGCATTAGC	CATAAAAAAA	A-----	180
181	-----AAAAA	AAAACCTTTT	CTCAGTGCTA	GAAAAAAACA	GAATAGACTC	ATTTGAAACT	240
241	GATCTTCTCT	CTACCAAAGG	GAGTAGCGCA	GTTGTGAAT	AGTAACCGTC	TGACAAGAAC	300
301	AGCAAATAAT	CCCACTAGTA	ATTCAGAAT	CCGCCTCCCT	AATTAGCCAG	AATTCACTGT	360
361	GATGCTGGCC	TCTATAATT	TTATTTGTCT	TCACCACTGA	TTAGTTTCAC	ATCATGAAA	420
421	TTGCATGTCA	TTTAGTTCA	CRTAGCCTCA	GAACCAACCC	TAATTCCCTAC	CTGCCATATC	480
481	CCTGTAGCAG	CTATTCGAAG	ATCACAAAGGT	GGGAACATGT	GTYATTTATC	TTTCTCTTA	540
541	CATTATTTA	GAGCATGGT	GCCTGCATCC	-----	GGGCCAAAAAA	AAAAGGATT	600

Fig. 5

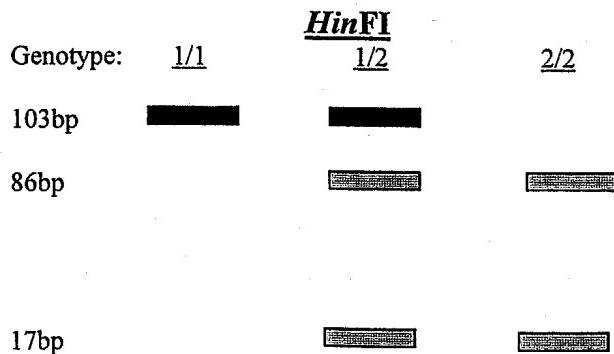


Fig. 6

P02285US5 (ISURF 2159 P1P2)
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PROLACTIN RECEPTOR GENE A
GENETIC MARKER FOR INCREASED
LITTER SIZE IN ANIMALS
Sheet 4 of 5

HpyCH4IV

Genotype: 1/1 1/2 2/2



Fig. 7

MseI

Genotype: 1/1 1/2 2/2



Fig. 8

Sequence 5' to 3' for porcine PRLR Sequence

GTACACACAC ACACACACAC ACACACACAC ACACACCACC GTTAAGCTNT CTTTCTGAAT CATGCCNACC
CGAGGGCCAC CCATAGAGGA GTGTGGTGA GGGTGCCTTG GCACCTCTGA GCCCTGCATC CCTACACCCA
CTAGCCTCAA GATGTCATC CCTGCCCTGG CCCCCACCCA TCTGCTTCTG TCACCAGCAG AATGGTCCAG
TCATTGAGCG GACCTTCATA TTGACTCCAG TGCTTCTGG CTTTTCTAG GACAGTCACC TCGGGAAAA
CCTGAGATCT TCAAATGTGCG TTCTCCCGAA AAGGAAACAT TCGCCTGCTG GTGGAAGCCG GGGGCGGATG
GAGGACTTCC TACCAACTAG ACGCTGACTT ACCACAAGGA AGGGTAAGCA TTCGCGTGTC TCCCAACAAA
CCACACGGAGT GTTCTCTCTC TGTGGGCCAG AGGAACACTG CTTCTGGGTT AGAACTGCCT CGCTTGGAG
TTCCCGTCAT GGCTCAGTGG TAACGAATC

Human exon 4

gacagttacccctgg aaaaccttag atcttaat gtcgttctcc caataaggaa acattcacct
gctggggag gcctgggaca gatggaggac ttccctaccaa ttattcactg acttaccaca
gggaagg

Alianment

Exon 4

Hsap g a c a g t t a c c t c c t g g a a a a c c t g a g a t c t t a a a t
G Q L P P G K P E I F K

pig ? a c a g t c a c c t c c g g g a a a a c c t g a g a t c t t c a a a t
S P F

Hsap g t c g t t c t c c c a a t a a g g a a a c a t t c a c c t g c t g g t
C R S P N K E T F T

pig g t c g t t c t c c c g a a a a g g a a a c a t t c g c c t g c t g g t
E A

Hsap g g a g g c c t g g g a c a g a t g g a g g a c t t c c t a c c a a t t
P P G T D G G I P T N

pig g g a a g c c g g g g g c g g a t g g a g g a c t t c c t a c c a a c t
K P A N

Hsap attcactgacttaccacagggaaagg
Y S L T Y H R E G

pig ? g a c g c t g a c t t a c c a c a a g g a a g g
** T K

Fig. 9